

**REMARKS**

The Examiner is respectfully requested to enter this Reply After Final in that it raises no new issues. In fact, the number of outstanding issues is reduced upon the cancellation of claim 23. Alternatively, the Examiner is respectfully requested to enter this Reply After Final in that it places the application into better form for Appeal.

Applicant respectfully requests the Examiner to reconsider the present application in view of the foregoing cancellation of claim 23.

In the present application, claims 11-22 are pending. Claim 23 has been canceled without prejudice or disclaimer of the subject matter contained therein.

Entry of the present amendment is respectfully requested. In view of the following remarks, Applicant respectfully requests that the Examiner withdraw all rejections and allow the currently pending claims.

**Issues Under 35 U.S.C. § 112, Second Paragraph**

Claim 23 has been rejected under 35 U.S.C. § 112, second paragraph, for reasons of indefiniteness. Applicant respectfully traverses.

Claim 23 has been canceled without prejudice or disclaimer of the subject matter contained therein, rendering this rejection moot. Applicant respectfully requests the Examiner to withdraw this rejection.

***Drawings and Specification***

Applicant notes that the Examiner considers the drawing and specification corrections to be acceptable (page 2 of the Office Action), although the Office Action Summary appears to object to the specification.

Corrected formal drawings have been submitted to the Official Draftsperson concurrently herewith. For the Examiner's information, a copy of the Letter to the Official Draftsman and a copy of the corrected formal drawings are attached hereto.

***Issues Under 35 U.S.C. § 103(a)***

Claims 11-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kurschner et al. (U.S. Patent No. 5,632,676; hereinafter Kurschner '676) in view Nishimoto et al. (U.S. Patent No. 6,165,964; hereinafter Nishimoto '964). Applicant respectfully traverses.

**The Present Invention and Its Advantages**

The present invention is directed to a method of sterilizing poultry meat. The present invention involves subjecting poultry meat to a contact treatment with an aqueous hinokitiol solution in poultry processing for a production of poultry meat. The contact treatment is carried out in one or more steps, where these steps are an evisceration

step, a chilling step or a wrapping step. With the present invention, there are safer, simpler and more effective methods of sterilizing poultry meat.

Distinctions over the Combination of Kurschner '676 and Nishimoto '964

The Kurschner '676 reference discloses a method for sanitizing fowl that has been killed, plucked and eviscerated, using peracetic acid solution (see Abstract; claim 1). The Nishimoto '964 reference is directed to using an aqueous antibacterial solution of hinokitiol for purposes of disinfecting, wherein such disinfecting can be conducted in food factories. The Office Action states that "it would be obvious to have utilized the hinokitiol solution in place of other sterilizing solutions in similar areas" (Office Action, page 5, lines 6-8). The Office Action also refers to cost, effectiveness, safety, availability, etc. as the proper means of combining the cited references. However, the asserted combination of Kurschner '676 and Nishimoto '964 is unsound and erroneous for several reasons.

First, Nishimoto '964 does not disclose that a hinokitiol solution can be applied to food. Nishimoto '964 specifically discloses:

The antimicrobial agent or microbicide of the present invention comprises the above-mentioned aqueous solution of essential oil from plants. The antimicrobial agent or microbicide of the present invention is useful, because they exhibit broad antimicrobial spectrum to many kinds of microbials and do not generate resistant strain to them. For example, the antimicrobial agent and/or microbicide can be widely used for kitchen goods such as a kitchen towel, a

cutting board, and knives; filters for an air conditioner, air cleaner and electric cleaner; and medical devices such as an inhalator, and a humidifier. Therefore, the antimicrobial agent or microbicide of the present invention is widely used in hospitals or food factories.

(See Col. 8, line 61 to Col. 9, line 6). Here, there is no disclosure of using an antimicrobial agent for food. Thus, one of ordinary skill in the art would not refer to Nishimoto '964, or be motivated in combining this reference with Kurschner '676, upon reading the contents of the primary Kurschner '676 reference. U.S. case law holds that there are three possible sources of motivation to combine references: the nature of the problem to be solved, the teaching of the prior art, and the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). Here, the requisite motivation is lacking since one of ordinary skill in the art would not refer to Nishimoto '964 because this secondary reference is directed to a different sterilization agent than what is disclosed in the Kurschner '676 reference. The nature of the problem, teachings, etc. are different in Nishimoto '964 than it is in Kurschner '676.

Second, even if a sterilizing agent is used to sterilize some goods or devices in factories (as disclosed by Nishimoto '964), one of ordinary skill in the art does not equate such disclosure as sterilization of food as well. Instead, one of ordinary skill in the art recognizes that great care is exercised when using sterilizing compositions for food due to any potential compromises in safety to

health. Further, great care must also be considered by one of ordinary skill in the art due to other problems, such as any influences in the color of the food to be sterilized, the effects on the flavor of the food, etc.

The cited Kurschner '676 reference even depicts the problems that one of ordinary skill in the art encounters when sterilizing food. Specifically, Kurschner '676 refers to the bloated appearance, changes in texture, and the discoloration in poultry meat caused by various sterilization methods (see Col. 1, lines 39-56). As an example, the method using peracetic acid cannot be in direct contact with fowl, "perhaps because of an adverse experience with hydrogen peroxide" (Col. 1, lines 54-56). Thus, in view of the considerable problems involved in sterilizing food, one of ordinary skill in the art would not equate disinfecting compositions for kitchen goods and filters with sterilization compositions for food. In other words, one of ordinary skill in the art would not consider applying hinokitiol, of which use is yet unknown, in sterilizing food.

Third, no scientific evidence has been presented to show that sterilization methods for disinfect medical equipment or factories are equivalent to sterilization methods to disinfect food. The Office Action merely states that it would be obvious to substitute the Nishimoto '964 component with the Kurschner '676 composition without any regard to the scientific implications or what one of ordinary skill in the art

actually considers when reading the cited references. Further, there is no disclosure in the cited references to demonstrate that hinokitiol is an "art-recognized equivalent" (as stated in the Office Action at page 4, lines 1-2).

Fourth, the cited Nishimoto '964 reference is in a nonanalogous art from the cited Kurschner '676. Applicant respectfully refers the Examiner to *In re Oetiker*. 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the appellant argued that the Examiner improperly used nonanalogous art as a basis for an obviousness rejection. The Examiner in *Oetiker* did not reason with what the cited reference disclosed, but instead stated that a person faced with the particular problem at hand would look to the nonanalogous art (the cited reference) because the nonanalogous art would solve the same problem that the present invention solved.

In response to the Examiner's reasoning, the Federal Circuit stated that when relying on a cited reference(s), where the cited reference(s) is used to reject the applicant's invention, that reference(s) "must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned" (24 USPQ2d at 1445; citing *In re Deminski*, 230 USPQ 313, 315 (Fed. Cir. 1986)).

However, the Federal Circuit continued on this line of reasoning with regard to nonanalogous art:

There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of invention would make the combination. That knowledge can not come from the applicant's invention itself.

(Citing *Diversitech Corp. v. Century Steps, Inc.*, 7 USPQ2d 1315, 1318 (Fed. Cir. 1988); *In re Geiger*, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987); *Interconnect Planning Corp. v. Feil*, 227 USPQ 543, 551 (Fed. Cir. 1985)). Then the court applied the facts to these principles.

The Federal Circuit decided in the applicant's behalf because the Examiner did not provide adequate reasons to rely on nonanalogous art, where the Examiner merely relied on a conclusion as to how a person faced with the particular problem at hand would look to the nonanalogous art because the nonanalogous art would solve the problem that the present invention solved.

That line of reasoning is held today, whether for analogous or nonanalogous art. In the present application, the Kurschner '676 and Nishimoto '964 references are not in an analogous art because they are directed to different sterilization methods and compositions used to disinfect different items. Thus, the cited references have been improperly combined for this additional reason.

Also, Applicant respectfully maintains the position that any cited reference used for a rejection under 35 U.S.C. § 103(a) must be considered in its entirety, i.e., as a whole. See *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). In other words, the cited Nishimoto '964 reference must

be read in its entirety, including the disclosure regarding "food factories," which is not a proper grounds for motivation and/or reasonable expectation of success.

Accordingly, Applicant respectfully submits that not all requirements for a *prima facie* case of obviousness have been met, and that this rejection has been overcome.

#### Unexpected Results of the Present Invention

As mentioned in Applicant's previous response ("Amendment and Reply Under 37 C.F.R. § 1.111", filed November 21, 2002), the advantages of the present invention have been experimentally confirmed. Applicant submits that such unexpected results rebut any asserted *prima facie* case of obviousness based on the Kurschner '676 and Nishimoto '964 references. As can be seen from Table 1 and Figures 3-7 of the present specification, the present invention unexpectedly provides safer and more effective sterilization methods for poultry meat (see page 16, lines 1-6) over conventional sterilization methods.

In addition, Applicant respectfully submits that the present invention (*i.e.*, use of hinokitiol) does not influence the color and taste of poultry meat, which cannot be expected by the cited Kurschner '676 reference. Applicant herein encloses a Declaration pursuant to 37 C.F.R. § 1.132, depicting these unexpected results, and respectfully request consideration of this Declaration.



A full and complete response has been made to the Office Action. The Examiner is respectfully requested to pass the application to issue.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Eugene T. Perez (Reg. No. 48,501) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to 37 C.F.R. § 1.17 and 1.136(a), Applicants respectfully petition for a one (1) month extension of time for filing a response in connection with the present application. The required fee of \$55.00 (small entity) is attached hereto.

**Attached hereto is a marked-up version of the changes made to the application by this Amendment.**

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By   
Gerald M. Murphy, Jr., #28,977

GMM/ETP  
1422-0508P

P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000

Attachments:

Version with Markings to Show Changes Made  
Declaration Under 37 C.F.R. § 1.132  
Copy of Letter to Official Draftsman and Corrected Drawings